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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/867,612	06/02/1997	YI WANG	ALX-149	2350

24395 7590 03/02/2004

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EXAMINER	
GAMBEL, PHILLIP	

ART UNIT	PAPER NUMBER
1644	

DATE MAILED: 03/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	08/867,612	WANG ET AL.	
	Examiner	Art Unit	
	Phillip Gambel	1644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12/4/03*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14 and 17-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14, 17-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's amendment, filed on 12/4/03, has been entered.
Claim 18 has been amended.

Claims 1-14 and 17-34 are pending and being acted upon presently

Claims 15 and 16 have been canceled previously.

2. The text of those sections of Title 35 USC not included in this Action can be found in a prior Action.
This Office Action will be in response to applicant's arguments, filed 12/4/03.
The rejections of record can be found in the previous Office Actions.

It is noted that applicant's arguments and the examiner's rebuttal are essentially the same of record.

3. Yet once again, applicant should amend the first line of the specification to update the status of the priority application, which is now abandoned.

4. The amendment, filed 11/5/01 (Paper No. 37), stands objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

The amendments to pages 59-60 with respect to the disclosure of "the ability of the 5G1.1 antibody to bind to both the alpha and beta chains of C5" do not appear to have adequate written description in the application as-filed.

Applicant's arguments in conjunction with a number of legal decisions, filed 12/4/03, have been fully considered but are not found convincing.

Applicant asserts that that the amendment to the specification to insert text relating to the ability of the 5G1.1 antibody to bind to both the alpha and beta chains of human C5 protein, as determined by immunoblot assay, wherein the text of Example 8 of the instant application exactly corresponds to the text of Example 7 in Wang et al. (U.S. Patent No. 6,074,642). Applicant further notes that the Wang et al. application (USSN 08/236,208) which evolved into the '642 patent was incorporated by reference into the specification of the instant application in its entirety (see page 6, lines 6-7 and page 60, lines 11-16).

Mere reference to another application, patent, or publication is not an incorporation of anything therein into the application containing such reference for the purpose of the disclosure required by 35 U.S.C. 112, first paragraph. In re de Seversky , 474 F.2d 671, 177 USPQ 144, (CCPA 1973). In addition to other requirements for an application, the referencing application should include an identification of the referenced patent, application, or publication. Particular attention should be directed to specific portions of the referenced document where the subject matter being incorporated may be found.

In contrast to applicant's assertions, the overlapping paragraph on pages 5-6 of the instant specification refers to USSN 08/236,208 in the context of providing therapeutic benefits impacting pathologic manifestations of multifaceted disease states and not in the context of the binding specificities of the 5G1.1 antibody.

Further, the disclosure on page 60 of the instant specification is a general statement that the teachings and disclosures of the various publication and patent disclosures are incorporated by references in their entireties and not in the context of the binding specificities of the 5G1.1 antibody.

To incorporate material by reference, the host document must identify with detailed particularity what specific material it incorporates and clearly indicate where the material is found in the various documents. See Advanced Display Systems, Inc. v. Kent State Univ., 54 USPQ2d 1673 (Fed. Cir. 2000) citing In re Seversky, 177 USPQ 144, 146 (CCPA 1973).

This, applicant has not done. Applicant has not identified with detailed particularity what specific material it incorporates and clearly indicated where the material is found in the various documents with respect to the binding specificity of the 5G1.1 antibody.

Again applicant is required to review the objected amendment to the specification and either cancel the new matter in the reply to this Office Action or provide sufficient direction to the written description for these amendments to the application as filed.

The specification does not provide sufficient blazemarks nor direction for the above-mentioned amendment on pages 59-60 of the instant specification. The instant specification now discloses limitations which were not clearly disclosed in the specification as-filed, and now change the scope of the instant disclosure as-filed. Such limitations which did not appear in the specification, as filed, introduce new concepts and violate the description requirement of the first paragraph of 35 U.S.C. 112.

Applicant is required to delete the new matter in the response to this Office Action.

Applicant's arguments are not found persuasive.

5. Claims 19-34 stand rejected under 35 U.S.C. § 112, first paragraph, as the specification does not contain a written description of the claimed invention, in that the disclosure does not reasonably convey to one skilled in the relevant art that the inventor(s) had possession of the claimed invention at the time the application was filed.

The specification as originally filed does not provide support for the invention as now claimed: "which binds the alpha chain of C5".

Applicant's arguments, filed 12/4/03, have been fully considered but are not found convincing essentially for the reasons of record.

Again, applicant directs written support to the amendatory material to pages 59-60 of the specification, filed 11/5/01 (Paper No. 37) (See Appendix D) for the written description for the above-mentioned "limitation".

Applicant's arguments and the examiner's rebuttal are essentially the same as addressed above and of record.

The following of record is reiterated for applicant's convenience.

The disclosure of anti-C5 antibodies as C5 blockers does not provide sufficient written description for an antibody "which binds the alpha chain of C5".

In contrast, the instant claims appear to set forth a new subgenus by reciting However, the disclosure of anti-C5 antibodies as C5 blockers does not provide sufficient written description for an antibody "which binds the alpha chain of C5".

In contrast, the instant claims appear to set forth a new subgenus by reciting an antibody "which binds the alpha chain of C5", which, in turn, encompasses C5-specificities not disclosed in the specification as filed.

Applicant's reliance on generic disclosure and possibly a single species does not provide sufficient direction and guidance to the "claimed limitations" having the features currently claimed

It cannot be said that a subgenus is necessarily described by a genus encompassing it and a species upon which it reads. In re Smith 173 USPQ 679, 683 (CCPA 1972). See MPEP 2163.05(b).

Applicant's reliance on generic disclosure and possibly a single species does not provide sufficient direction and guidance to the "claimed limitations" having the features currently claimed

Therefore even the reliance on the inherent properties of the specific 5G1.1 antibody species to bind both the alpha and beta chains of the human C5 protein does not provide adequate written description to support the current claims drawn to methods which employ antibodies that bind only the alpha chain of human C5.

The instant claims now recite limitations which were not clearly disclosed in the specification as-filed, and now change the scope of the instant disclosure as-filed. Applicant is claiming a subgenus not supported by the specification as-filed. Such limitations recited in the present claims, which did not appear in the specification, as filed, introduce new concepts and violate the description requirement of the first paragraph of 35 U.S.C. 112.

Applicant is required to cancel the new matter in the response to this Office Action
Alternatively, applicant is invited to provide sufficient written support for the "limitation" indicated above.

Applicant's arguments are not found persuasive.

6. Applicant's amendment, filed 12/4/03, has obviated the previous rejection of claim 18 under 35 U.S.C. § 112, second paragraph.

7. Claims 1-10, 14, 17-28 and 32-33 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Larrick et al. (EP 0245993) (see entire document).

Applicant's arguments, filed 12/4/03, have been fully considered but are not found convincing essentially for the reasons of record.

Applicant notes that the antibodies of Larrick et al. are specific for human C5a (e.g. page 2, lines 1-2 and page 3, lines 1-2).

Applicant submits that C5a is a cleavage product of C5 (e.g. page 3, lines 5-6 of the specification).

Applicant asserts that the antibodies are specific for C5a and not for C5 and/or the alpha chain of C5 but does not provide any objective evidence to support this assertion.

In contrast to applicant assertions and as indicated previously, Larrick et al. teach antibodies, including monoclonal antibodies and fragments thereof (e.g. pages 3-4 and Claims) that bind C5a and DES-ARG74-C5a which bind human complement component C5a which are particularly useful for treating conditions associated with or caused by injurious complement activation, including chronic autoimmune diseases such as rheumatoid arthritis (see entire document, including page 5, paragraph 1 of the specification, Abstract and Claims). Larrick et al. teach that the anti-human C5a antibodies bind with an affinity of at least 108 liters/mole (page 3) and are able to neutralize C5a, including inhibition of binding regardless of the particular mechanism involved wherein the antibody affects the biological activity of human C5a (page 4, paragraphs 12-13).

Although applicant asserts that Larrick et al. does not disclose a method for the treatment of established joint inflammation, it does not appear that the claim language or limitations result in a manipulative difference in the method steps when compared to the prior art disclosure. Although the reference does not disclose all of the claimed properties encompassed by the instant claims per se (e.g. see instant claims 3-10, 14, 20-28, 32) per se, given the properties of the referenced anti-human C5a antibodies to inhibit a chronic autoimmune disease such as rheumatoid arthritis and that such anti-human C5a antibodies to neutralize adverse C5a-mediated mechanisms; the claimed functional limitations would be inherent properties of the referenced human C5a-specific antibodies to treat rheumatoid arthritis. It is noted that Larrick et al. teach various assays and properties associated with testing neutralizing anti-C5a antibodies (e.g. see pages 4-5 and Examples). Applicant is reminded that no more of the reference is required than that it sets forth the substance of the invention. The claimed functional limitations would be inherent properties of the referenced methods to treat rheumatoid arthritis with neutralizing anti-human C5a antibodies.

Applicant's arguments are not found persuasive.

7. Claims 1-14 and 17 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Sims et al. (U.S. Patent No. 5,635,178) for the reasons of record set forth in Paper No. 38/44/49.

Applicant's arguments, filed 12/4/03, have been fully considered but are not found convincing essentially for the reasons of record.

Applicant's arguments and the examiner's rebuttal are essentially the same of record.

Applicant argues in conjunction with certain legal citations that the identical invention must be shown in as complete detail as is contained in the ... claim and anticipation cannot be predicated on teachings that are vague or based on conjecture or mere conjecture as to the characteristics.

Again applicant essentially asserts that Sims et al. is limited to teaching antibodies against P18, antibodies to C7 and antibodies to C9 and that Sims et al. does not teach antibodies specific for C5.

Again applicant asserts that nowhere does Sims et al. teach antibodies specific against C5 or a method for the treatment of established joint inflammation comprising administering a composition comprising an antibody specific against C5.

In contrast to applicant's assertions, Sims et al. claims methods and compositions comprising antibodies that specifically bind a component of the C5b-9 complex (see Claims 1-5). Given that C5b is a component of the C5b-9 complex, the claimed methods comprising antibodies that specifically bind a component of the C5b-9 complex reads on the claimed antibody specificity for C5.

Rather than a genus anticipating a species, here an antibody that bind C5b anticipates antibodies that bind C5.

In contrast to applicant's assertions, Sims et al. teach the treatment of patients with immune disorders and diseases such as rheumatoid arthritis (column 14, paragraph 2, particularly, line 28). Given the teaching of treating rheumatoid arthritis, Sims et al. is teaching the treatment of a patient with established joint inflammation.

Applicant is reminded that no more of the reference is required than that it sets forth the substance of the invention. The claimed functional limitations encompassing properties of the active ingredient in the claims methods would be inherent properties of the claim methods to treat rheumatoid arthritis with antibodies that binds to a component forming the C5b-9 complex

Applicant's arguments are not found persuasive.

8. Claims 1-14, 17-34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Larrick et al. (EP 0245993) AND/OR Sindelar et al. (U.S. Patent No. 5,173,499; 1449) AND/OR Sims et al. (U.S. Patent No. 5,635,178) in view of Auda et al. (Rheumatol. Int. 10: 185-18, 1990; 1449) , Wurzner et al. (Complement Inflamm. 8: 328-340, 1991; 1449) and Montz et al. (Cell. Immunol. 127: 337-351, 1990; 1449) essentially for the reasons of record.

Claims 1-14 and 17-34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Larrick et al. (EP 0245993) AND/OR Sindelar et al. (U.S. Patent No. 5,173,499; 1449) AND/OR Sims et al. (U.S. Patent No. 5,635,178) in view of Auda et al. (Rheumatol. Int.10: 185-18, 1990; 1449) , Wurzner et al. (Complement Inflamm. 8: 328-340, 1991; 1449) and Montz et al. (Cell. Immunol. 127: 337-351, 1990; 1449) as applied to claims 1-14, 17-34 above and in further evidence of Rollins et al. (U.S. Patent No. 5853,722; of record) essentially for the reasons of record.

Applicant's arguments, filed 12/4/03, have been fully considered but are not found convincing essentially for the reasons of record.

Applicant's arguments and the examiner's rebuttal are essentially the same of record. In addition, applicant asserts that Larrick et al. teach away from the use of antibodies specific for C5 or which bind the alpha chain of C5 for the treatment of condition associated with complement activation.

Applicant's arguments and the examiner's rebuttal with respect to Larrick et al. (EP 0245993) has been addressed above.

A prior art reference may be considered to teach away when "a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant." See In re Gurley , 31 USPQ2d 1130, 1131 (Fed. Cir. 1994).

Here in contrast to applicant's assertions of teaching away by the prior art, previously added Larrick et al. teach antibodies, including monoclonal antibodies and fragments thereof (e.g. pages 3-4 and Claims) that bind C5a and DES-ARG74-C5a which bind human complement component C5a which are particularly useful for treating conditions associated with or caused by injurious complement activation, including chronic autoimmune diseases such as rheumatoid arthritis (see entire document, including page 5, paragraph 1 of the specification, Abstract and Claims).

Again, it is noted that Wang asserts that it was known at the time the invention was made that animals carrying a genetic defect such that they can produce no C5 can still established joint inflammation.

Further Wang asserts that while preliminary prophylaxis results showed a an unexpectedly dramatic effect in inhibiting the development of joint inflammation, he predicted that C5 blocker administration would not be effective in treating established joint inflammation in the absence of anti-T cell treatments for effective treatment.

While Sindelar et al. is directed to chemical compounds, Sindelar et al. clearly teach the biological effects of C5a, including its role in arthritis (see Background of the Invention, including Tables II / III) and clearly teach administering inhibitive compounds which ameliorate or prevent detrimental effects caused by the complement system, including C5a for diseases or disorders such as those listed in Table III (e.g. see Therapeutic Uses of the Compounds of the Invention).

As pointed out previously, Sims et al. (U.S. Patent No. 5,635,178) had been added to the rejection of record. Sims et al. teach methods of inhibiting platelet or endothelial cell activation by complement proteins comprising the administration of an antibody which specifically binds to a component forming the C5b-9 complex, including effective amounts to inhibit disorders such as arthritis (see entire document, including Claims 1-3).

As pointed out above and previously in contrast to applicant's assertions, Sims et al. claims methods and compositions comprising antibodies that specifically bind a component of the C5b-9 complex (see Claims 1-5). Given that C5b is a component of the C5b-9 complex, the claimed methods comprising antibodies that specifically bind a component of the C5b-9 complex reads on the claimed antibody specificity for C5. Alternatively, this teaching of targeting the C5b-9 provides for sufficient direction and motivation to target C5 with an expectation of success

Also, as pointed out above and previously in contrast to applicant's assertions, Sims et al. teach the treatment of patients with immune disorders and diseases such as rheumatoid arthritis (column 14, paragraph 2, particularly, line 28). Given the teaching of treating rheumatoid arthritis, Sims et al. is teaching the treatment of a patient with established joint inflammation.

Therefore, the prior art is directed towards inhibiting the same target (complement, C5 or C5a) and the same disorders or diseases (e.g. arthritis as it reads on established joint disease), including antibodies that bind the C5b-9 complex (Sims et al.) and more specifically C5a (Larrick et al.), encompassed by the claimed invention.

It is noted that both Larrick et al. and/or Sims et al. teach targeting various diseases or disorders by inhibiting complement-mediated events, including rheumatoid arthritis and conditions such as vascular occlusion, reocclusion after surgery, coronary thrombosis and myocardial infarction, which are the subject of the methods taught by Rollins et al.

Therefore, it was recognized by the ordinary artisan at the time the invention was made that inhibiting complement-mediated events, including C5- / C5a-mediated events, the ordinary artisan could inhibit various disorders and that targeting one disorder could provide an expectation of success in treating the other, including the explicit teachings of Larrick et al.

For example, the teachings of Rollins et al., including its teaching of the 5G1.1. specificity on inhibiting complement /C5a activity in extracorporeal circulation could inhibit arthritis, as indicated by the teachings Sindelar et al. (e.g. see Table III) as well as Sims et al. (e.g. Claims 1-3) and Larrick et al. (see entire document, including Claims).

With respect to the C5a specificity, Wurzner et al. clearly teach antibodies that inhibit the biological effects of C5a and TCC (see Discussion).

Again the teachings of the primary references including the explicit teachings of Larrick et al. teach the use of C5a-specific antibodies to treat rheumatoid arthritis as well as other diseases and conditions associated with complement activation.

In this case, the combination of prior art references are drawn to the inhibition of complement-mediated activity, including C5-mediated activity, and the inhibition of complement-mediated inflammatory processes, such as arthritis, including the use of C5a-specific antibodies. See Larrick et al., Sindelaar et al. and Sims et al.

Also, it appears that applicant's arguments addressed the references individually. One cannot show non - obviousness by attacking references individually where the rejections are based on combinations of references. In re Keller , 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., Inc. , 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). See MPEP 2145.

Applicant's arguments are not found persuasive.

9. No claim is allowed.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip Gambel whose telephone number is (571) 272-0844. The examiner can normally be reached Monday through Thursday from 7:30 am to 6:00 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (571) 272-0841.

The fax number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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March 1, 2004